PTO/SB/05 (11-00) Approved for use through 10/31/2002. OMB 0651-0032 lease type a plus sign (+) inside this box U.S. Patent and Trademark Office; U.S. UEPAR I MEN I OF COMMERCE

WT & TRAUnder the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. UTILITY DB000575~010 Attorney Docket No. PATENT APPLICATION Keeth First Inventor TRANSMITTAL 256 MEG Dynamic Access Memory EJ116538197US (Only for new nonprovisional applications under 37 CFR 1.53(b)) Express Mail Label No. **APPLICATION ELEMENTS** Assistant Commissioner for Patents ADDRESS TO: **Box Patent Application** See MPEP chapter 600 concerning utility patent application contents. Washington, DC 20231 Fee Transmittal Form (e.g., PTO/SB/17) CD-ROM or CD-R in duplicate, large table or an original and a duplicate for fee processing) Computer Program (Appendix) Applicant claims small entity status. 8. Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27. (if applicable, all necessary) Total Pages 233 3. LX Specification Computer Readable Form (CRF) - Descriptive title of the invention Specification Sequence Listing on: - Cross Reference to Related Applications CD-ROM or CD-R (2 copies); or Statement Regarding Fed sponsored R & D i. 🔲 - Reference to sequence listing, a table, i i. 🔲 or a computer program listing appendix - Background of the Invention Statements verifying identity of above copies - Brief Summary of the Invention ACCOMPANYING APPLICATION PARTS - Brief Description of the Drawings (if filed) - Detailed Description 9. Assignment Papers (cover sheet & document(s)) - Claim(s) 37 CFR 3.73(b) Statement Power of - Abstract of the Disclosure 10. (when there is an assignee) Attorney 4. X Drawing(s) (35 U.S.C. 113) [Total Sheets English Translation Document (if applicable) Copies of IDS Information Disclosure 5. Oath or Declaration 12. [Total Pages Citations Statement (IDS)/PTO-1449 13. X Newly executed (original or copy)
Copy from a prior application (37 CFR 1.63 (d))
(for continuation/divisional with Box 18 completed) Preliminary Amendment Return Receipt Postcard (MPEP 503) b. (Should be specifically itemized) **DELETION OF INVENTOR(S)** Certified Copy of Priority Document(s) (if foreign priority is claimed) 15. Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR Request and Certification under 35 U.S.C. 122 1.63(d)(2) and 1.33(b). (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. Application Data Sheet. See 37 CFR 1.76 17. X Other: Microfiche Appendix ... 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: 916,692 Divisional Continuation-in-part (CIP) of prior application No.: 2818 Examiner Group Art Unit: For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS Customer Number or Bar Code Label Marketing, or say proceeds Name Edward L. Pencoske

Thorp Reed & Armstrong, LLP One Oxford Centre, <u>Address</u> F1. 301 Grant St. Pittsburgh City State PA 15219 Zip Code Country Telephone Fax U.S.A. 412/394-7789 4123942555

Name (Print/Type) Edward L. Pencoske Registration No. (Attorney/Agent) 29, 688

Signature Date 08 March 2001

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on

the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Box Patent Application, Washington, DC 20231.

EXHIBIT





The dating stamp of the USPTO on this card will be taken as an indication that the accompanying paper(s) was filed.

Applicant(s) Keeth
Title 256 MEG Dynamic Access Memory

Pages of Spec. 233 No. of Claim 80
Sheets of Drawings 367
Declaration X Verified Stmt.
Amt. of Check \$710 and \$1088
Atty's File No. DB000575-010

DOCKETED

27 MAR 01

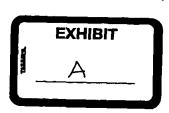
ELP:sh

08 March 2001

*PTO/SB/05
*PTO/SB/17 (x2)
*Preliminary Amendment
*Microfiche Appendix
*Statement re
Deletion of Inventors
*Change of Address

JC973 V.S. PTO 09/801628

MAR 2 6 2001



UNITED STATES PATENT & TRADEMARK OFFICE Washington, D.C. 20231

REQUEST FOR PATENT FEE REFUND						
1 Date of Request: 2/16/03 2 Serial/Patent # 09/801,628						
3 Please refund the following fee(s):		4 PAPER NUMBER		5 DATE FILED	6 AMOUNT	
	Filing				\$	
	Amendment				\$	
	Extension of Time				\$	
	Notice of Appeal/Appeal				\$	
X	Petition	4		6/6/01	\$ /30	
1	Issue				\$	
	Cert of Correction/Terminal Disc.				\$	
	Maintenance				\$	
	Assignment				\$	
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10 REASON:		Treasury Check				
	Overpayment	X	С	redit Dep	osit A/C #:	
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Postrard proves allegently moted drugs were						
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OFFICE: Office of Retitions						
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APPROVED: Chica Kelly DATE: 2/19/03						

Instructions for completion of this form appear on the back. After completion, attach white and yellow copies to the official file and mail or hand-carry to:

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envelope address to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Attorney for Amilians

Date: 4 June 2001

3 Section \$ 0300

PATENT

Attorney Docket No. DB000575-010

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Keeth, et. al.)	<u>.</u> .
)	Examiner: Not Yet Assigned
Serial No.:	09/801,628)	_
)	Art Unit: 2818
Filed:	March 8, 2001)	

Entitled: 256 MEG DYNAMIC RANDOM ACCESS MEMORY

TRANSMITTAL LETTER FOR RESPONSE TO NOTICE TO FILE CORRECTED APPLICATION PAPERS - FILING DATE GRANTED

Assistant Commissioner for Patents ATTN: Box MISSING PARTS Washington, D.C. 20231

RECEIVED

DEC 24 2002

OFFICE OF PETITIONS

Dear Sir:

This is in response to the Notice to File Corrected Application Papers - Filing Date Granted (hereinafter "the Notice") mailed on April 30, 2001 in the above-captioned application having a shortened two month statutory period of response.

Enclosed herewith are the following:

- 1. a Petition in Response to the Notice to File Corrected Application Papers having attached thereto:
 - Exhibit A a copy of the return postcard as evidence that 367 sheets of drawings were filed with the original divisional application; and
 - Exhibit B a copy of the Utility Patent Application Transmittal form as evidence that 367 sheets of drawings were filed with the original divisional application;
- 2. one copy each of Figures 40A and 81A that were filed as part of the 367 sheets of drawings;
- 3. a revised abstract, not exceeding 250 words in accordance with MPEP 608.01(b), in addition to a clean copy of the revised abstract;

- 4. a copy of the "Notice to File Corrected Application Papers" (Form PTO-1533); and
- 5. a check for \$130.00 to cover the petition fee under 37 C.F.R. 1.117(h), which will be refunded if the Petition in Response to the Notice to File Drawings is granted.

The Commissioner is hereby authorized to charge any underpayment or credit any overpayment to our Deposit Account No. 20-0888. A copy of this transmittal letter is enclosed.

A return postcard is also enclosed. Please date stamp and mail the postcard in order to acknowledge receipt of this correspondence.

Respectfully submitted,

Edward L. Pencoske

Reg. No. 29,688

THORP, REED & ARMSTRONG, LLP

One Oxford Centre

301 Grant Street, 14th Floor

Pittsburgh, PA 15219-1425

(412) 394-7789

Dated: June, 2001

Attorneys for Applicants





MAY 04 2001

United States Patent and Trademark Office

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APPLICATION NUMBER

FILING/RECEIPT DATE

FIRST NAMED APPLICANT

ATTORNEY DOCKET NUMBER

09/801,628

03/08/2001

Brent Keeth

DB000575-010

CONFIRMATION NO. 1797

Date Mailed: 04/30/2001

FORMALITIES LETTER

OC000000006022241

Edward L. Pencoske Thorp Reed & Armstrong, LLP One Oxford Centre, 14th Fl. 301 Grant St. Pittsburgh, PA 15219

06/07/2001 SMINASS1 00000074 03001628

NOTICE TO FILE CORRECTED APPLICATION PAPERS

106707/2001 SiTHASSI 00000074 09801628 -06707/2001 SiTHASSI 00000074 09801628 -01 FC:105

Filing Date Granted

This application has been accorded an Application Number and Filing Date. The application, however, is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given **TWO MONTHS** from the date of this Notice within which to correct the informalities indicated below. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a)

The required item(s) identified below must be timely submitted to avoid abandonment:

An Abstract not to exceed 150 words in length, commencing on a separate sheet (37 CFR 1.72(b)).

The following item(s) appear to have been omitted from the application:

- Figure(s) 40A, 81A described in the specification.
- I. Should applicant contend that the above-noted omitted item(s) was in fact deposited in the U.S. Patent and Trademark Office (USPTO) with the nonprovisional application papers, a copy of this Notice and a petition (and \$130.00 petition fee (37 CFR 1.17(h))) with evidence of such deposit **must** be filed within **TWO MONTHS** of the date of this Notice. The petition fee will be refunded if is determined that the item(s) was received by the USPTO.
- II. Should applicant desire to supply the omitted item(s) and accept the date that such omitted item(s) was filed in the USPTO as the filing date of the above-identified application, a copy of this Notice, the omitted item(s) (with a supplemental oath or declaration in compliance with 37 CFR 1.63 and 1.64 referring to such items), and a petition under 37 CFR 1.182 (with the \$130.00 petition fee (37 CFR 1.17(h)) requesting the later filing date must be filed within TWO MONTHS of the date of this Notice.
- III. The failure to file a petition (and petition fee) under the above options (I) or (II) within **TWO MONTHS** of the date of this Notice (37 CFR 1.181(f)) will be treated as a constructive acceptance by the applicant of the application as deposited in the USPTO. THIS **TWO MONTH PERIOD IS NOT EXTENDABLE UNDER 37 CFR 1.136(a) or (b)**. In the absence of a timely filed petition in reply to this Notice, the application will



maintain a filing date as of the date of deposit of the application papers in the USPTO, and original application papers (*i.e.*, the original disclosure of the invention) will include only those application papers oresent in the USPTO on the date of deposit.

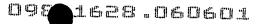
In the event that applicant elects not to take action pursuant to options (I) or (II) above (thereby constructively electing option (III)), amendment of the specification to renumber the pages consecutively and cancel incomplete sentences caused by any omitted page(s), and/or amendment of the specification to cancel all references to any omitted drawing(s), relabel the drawing figures to be numbered consecutively (if necessary), and correct the references in the specification to the drawing figures to correspond with any relabelled drawing figures, is required. Any drawing changes should be accompanied by a copy of the drawing figures showing the proposed changes in red ink. Such amendment and/or correction to the drawing figures, if necessary, should be by way of preliminary amendment submitted prior to the first Office action to avoid delays in the prosecution of the application.

A copy of this notice MUST be returned with the reply.

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY





A 256 Meg dynamic random access memory is comprised of a plurality of cells organized into individual arrays, [with the arrays being] which are organized into 32 Meg array blocks, which are organized into 64 Meg quadrants. Sense amplifiers are positioned between adjacent rows in the individual arrays[while]; row decoders are positioned between adjacent columns in the individual arrays. In certain of the gap cells, multiplexers are provided to transfer signals from I/O lines to data lines. A datapath is provided which, in addition to the foregoing, includes array I/O blocks, responsive to the datalines from each quadrant to output data to a data read mux, data buffers, and data driver pads. The write data path includes a data in buffer and data write muxes for providing data to the array I/O blocks. A power bus is provided which minimizes routing of externally supplied voltages, completely rings each of the array blocks, and provides gridded power distribution within each of the array blocks. A plurality of voltage supplies provide the voltages needed in the array and in [the] peripheral circuits. The power supplies are organized to match their power output to the power demand and to maintain a desired ratio of power production capability and decoupling capacitance. A powerup sequence circuit is provided to control the powerup of the chip. Redundant rows and columns are provided as is the circuitry necessary to logically replace defective rows and columns with operational rows and columns. Circuitry is [also] provided on chip to support various types of test modes.